

**Notice of Allowability**

Application No.

10/048,058

Examiner

Dah-Wei D Yuan

Applicant(s)

YAMANASHI, FUMINORI

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/27/04.
2. ☒ The allowed claim(s) is/are 2-14.
3. ☒ The drawings filed on 1/25/02, 5/27/04 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 01252002
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

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**FUEL CELL FOR MOVING BODY AND CONROL METHOD THEREOF**

Examiner: Yuan

S.N. 10/048,058

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July 16, 2004

**Detailed Action**

1. The Applicant's amendment filed on May 27, 2004 was received. The specification and drawings were amended. Claim 1 was cancelled. Claims 2,7,13,14 were amended.
2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on February 27, 2004.

***Claim Rejections***

3. The claim rejections under 35 U.S.C. 103(a) as obvious over Motozono et al. and Benz et al. on claims 1,13,14 are withdrawn because the independent claims 1, 13,14 have been amended.

***Reasons for Allowance***

4. Claims 2-14 are allowed. The invention of independent claim 2 recites a fuel cell system for a moving body comprising a reforming reactor, a carbon monoxide removing reactor, a fuel cell for generating electric power, a compressor for supplying the gas including oxygen, a running state detecting section, an accelerator opening detecting section, a control section that supplies the minimum hydrogen required for maintaining a temperature of the reforming reactor and the minimum gas including oxygen required for maintaining a temperature of the carbon monoxide removing reactor, a combustor for processing discharged reformed gas and discharged

gas including oxygen, wherein the control section supplies minimum gas including oxygen required for maintaining a temperature of the combustor when it is judged that the moving body is running the accelerator is closed based on the information of the running state detecting section and the accelerator opening detecting section. The closest prior arts of record, Motozono et al. and Benz et al. do not teach or suggest the control section supplies minimum gas including oxygen required for maintaining a temperature of the combustor as recited in the claim. The invention of independent claim 13 recites a control method of a fuel cell system for a moving body comprising supplying fuel, water and gas including oxygen to a reforming reactor such that minimum hydrogen required for maintaining a temperature of the reforming reactor is generated, and minimum gas including oxygen required for maintaining a temperature of a carbon monoxide removing reactor is generated and supplying minimum gas including oxygen required for maintaining a temperature of a combustor when the moving body is running and the accelerator is closed. The closest prior arts of record, Motozono et al. and Benz et al. do not teach or suggest to supply minimum gas including oxygen required for maintaining a temperature of a combustor when the moving body is running and the accelerator is closed as stated in the claim. The invention of independent claim 14 recites a fuel cell system for a moving body comprising a reforming reactor, a carbon monoxide removing reactor, a fuel cell for generating electric power, a compressor for supplying the gas including oxygen, a running state detecting means, an accelerator opening detecting means, a control means that supplies the minimum hydrogen required for maintaining a temperature of the reforming reactor and the minimum gas including oxygen required for maintaining a temperature of the carbon monoxide removing reactor, a

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combustor for processing discharged reformed gas and discharged gas including oxygen, wherein the control section supplies minimum gas including oxygen required for maintaining a temperature of the combustor when it is judged that the moving body is running the accelerator is closed based on the information of the running state detecting section and the accelerator opening detecting section. The closest prior arts of record, Motozono et al. and Benz et al. do not teach or suggest the control means supplies minimum gas including oxygen required for maintaining a temperature of the combustor when the moving body is running and the accelerator is closed as recited in the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR


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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dah-Wei D. Yuan  
July 16, 2004

A handwritten signature in cursive script, appearing to read "Dahwei Yu", written in dark ink.